

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method in a wearable computing device for improving automated responses to a current context of a user of the wearable computing device based on automated learning techniques, the current context of the user being represented by a plurality of context attributes that each model an aspect of the context, multiple defined contextual situations each specifying values for at least one of the context attributes, multiple automated responses being associated with the defined contextual situations, the method comprising:

repeatedly,

receiving an indication of current context information about the user that includes current values for each of the plurality of context attributes;

determining one of the defined contextual situations that matches the indicated current context information in such a manner that the included current values of the indicated current context information include the values for the context attributes specified by the one defined contextual situation;

automatically providing to the user one of the automated responses that is associated with the one defined contextual situation;

receiving an indication from the user of an alternate automated response to be provided; and

storing an indication of a possible relationship between the indicated current context information and the alternate automated response;

automatically detecting a relationship between an identified contextual situation and one of the alternate automated response based on analysis of repeated patterns in the stored indications in which that alternate automated response is indicated by the user; and

creating an association between the identified contextual situation and the one alternate automated response,  
so that when the identified contextual situation is determined in the future to match current context information, the one alternate automated response can be provided to the user.

2. (Original) The method of claim 1 including, before the creating of the association between the identified contextual situation and the one alternate automated response, verifying appropriateness of the association.

3. (Original) The method of claim 2 wherein the verifying of the appropriateness of the association includes receiving explicit authorization from the user to create the association.

4. (Original) The method of claim 3 wherein the receiving of the explicit authorization from the user includes:

suggesting the association between the identified contextual situation and the one alternate automated response to the user;

receiving from the user a request to explain the suggested association;

automatically explaining the suggested association by generating a response based on the analyzed repeated patterns; and

receiving from the user the explicit authorization.

5. (Original) The method of claim 2 wherein the verifying of the appropriateness of the association is performed automatically without user intervention.

6. (Original) The method of claim 2 wherein the verifying of the appropriateness of the association includes determining that providing the one alternate automated response when the user is in the identified contextual situation is safe.

7. (Original) The method of claim 1 including, after the creating of the association:

receiving an indication of current context information about the user that includes current values for each of the plurality of context attributes;

determining that the identified contextual situation matches the indicated current context information in such a manner that the included current values of the indicated current context information include the values for the context attributes specified by the one identified contextual situation; and

automatically providing to the user the alternate automated response that is associated with the identified contextual situation.

8. (Original) The method of claim 1 including, after each of the received indications from the user to provide an alternate automated response, providing that alternate automated response to the user.

9. (Original) The method of claim 1 wherein at least some of the automated responses include presenting information to the user that is appropriate based on the one defined contextual situation determined to match the current context information.

10. (Original) The method of claim 1 including, after one of the automatic providings to the user of one of the automated responses associated with one of the defined contextual situations:

receiving from the user a request to explain the providing of the automated response; and

explaining the provided response based on the association between that one automated response and that one defined contextual situation.

11. (Original) The method of claim 1 wherein the analysis of the repeated patterns in the stored indications is based on an automated learning algorithm.

12. (Original) The method of claim 1 wherein the identified contextual situation is not a defined contextual situation, and wherein the creating of the association includes defining the identified contextual situation.

13. (Original) The method of claim 1 wherein before the creating of the association the identified contextual situation is a defined contextual situation having an existing association with an automated response distinct from the one alternate automated response, and wherein the creating of the association includes modifying the existing association.

14. (Original) The method of claim 1 wherein the identified contextual situation represents an explicit context rules that matches current context information, and wherein the alternate automated response includes processing the matching current context information in order to provide additional context information about the user.

15. (Original) The method of claim 1 wherein the alternate automated response includes presenting information to the user that is appropriate to the identified contextual situation.

16. (Original) The method of claim 1 wherein the alternate automated response includes presenting functionality to the user that is appropriate to the identified contextual situation.

17. (Original) The method of claim 1 wherein the alternate automated response includes presenting a graphical user interface control to the user that is appropriate to the identified contextual situation.

18. (Original) The method of claim 1 wherein the alternate automated response includes automatically performing at least some of the steps in a multi-step task.

19. (Original) The method of claim 1 wherein the alternate automated response includes prompting the user to take an indicated change.

20. (Original) The method of claim 1 wherein the alternate automated response includes notifying the user of a pre-defined occurrence.

21. (Original) The method of claim 1 wherein at least one of the context attributes represents information about a user of the wearable computing device.

22. (Original) The method of claim 21 wherein the represented information reflects a modeled mental state of the user.

23. (Original) The method of claim 1 wherein at least one of the context attributes represents information about the wearable computing device.

24. (Original) The method of claim 1 wherein at least one of the context attributes represents information about a physical environment.

25. (Original) The method of claim 1 wherein at least one of the context attributes represents information about a cyber-environment of a user of the wearable computing device.

26-33. (Canceled.)

34. (New) A computer-readable medium whose contents cause a wearable computing device to improve automated responses to a current context for a user of the wearable computing device based on automated learning, the current context being represented by a plurality of context attributes that each model an aspect of the context, multiple defined contextual situations each specifying values for at least one of the context attributes, multiple

automated responses being associated with the defined contextual situations, by performing a method comprising:

repeatedly,

receiving an indication of current context information that includes current values for each of at least some of the plurality of context attributes;

determining one of the defined contextual situations that matches the indicated current context information;

automatically providing one of the automated responses that is associated with the one defined contextual situation;

receiving an indication from the user of an alternate automated response to be provided; and

storing an indication of the indicated current context information and the alternate automated response;

automatically detecting a relationship between an identified contextual situation and one of the alternate automated responses based on analysis of patterns of that alternate automated response being indicated by the user; and

creating an association between the identified contextual situation and the one alternate automated response so that the one alternate automated response can in the future be provided to the user for that contextual situation.

35. (New) The computer-readable medium of claim 34 including, before the creating of the association between the identified contextual situation and the one alternate automated response, verifying appropriateness of the association.

36. (New) The computer-readable medium of claim 34 including, after the creating of the association, detecting the identified contextual situation and in response providing the alternate automated response that is associated with the identified contextual situation.

37. (New) The computer-readable medium of claim 34 wherein at least some of the automated responses each include presenting information to the user that is appropriate based on a current contextual situation.

38. (New) The computer-readable medium of claim 34 including, after one of the automatic providings to the user of one of the automated responses associated with one of the defined contextual situations, explaining to the user the provided response based on the association between that one automated response and that one defined contextual situation.

39. (New) The computer-readable medium of claim 34 wherein the analysis of the patterns is based on an automated learning algorithm.

40. (New) The computer-readable medium of claim 34 wherein the identified contextual situation is not a defined contextual situation, and wherein the creating of the association includes defining the identified contextual situation.

41. (New) The computer-readable medium of claim 34 wherein at least one of the context attributes represents information about a user of the wearable computing device.

42. (New) The computer-readable medium of claim 41 wherein the represented information reflects a modeled mental state of the user.

43. (New) The computer-readable medium of claim 34 wherein at least one of the context attributes represents information about the wearable computing device.

44. (New) The computer-readable medium of claim 34 wherein at least one of the context attributes represents information about a physical environment.

45. (New) The computer-readable medium of claim 34 wherein at least one of the context attributes represents information about a cyber-environment of a user of the wearable computing device.

46. (New) The computer-readable medium of claim 34 wherein the computer-readable medium is a memory of a computing device.

47. (New) The computer-readable medium of claim 34 wherein the computer-readable medium is a data transmission medium transmitting a generated data signal containing the contents.

48. (New) The computer-readable medium of claim 34 wherein the contents are instructions that when executed cause the computing device to perform the method.

49. (New) A wearable computing system configured to improve automated responses to a current context for a user, the current context being represented by a plurality of context attributes that each model an aspect of the context, multiple defined contextual situations each specifying values for at least one of the context attributes, multiple automated responses being associated with the defined contextual situations, comprising:

a first component that is configured to repeatedly, receive an indication of current context information that includes current values for each of at least some of the plurality of context attributes, determine one of the defined contextual situations that matches the indicated current context information, determine one of the automated responses that is associated with the one defined contextual situation, receive an indication from the user of an alternate automated response, and store an indication of the indicated current context information and the alternate automated response; and

a second component that is configured to automatically detect a relationship between an identified contextual situation and one of the alternate automated responses based on that alternate automated response being previously indicated by the user and to create an



association between the identified contextual situation and the one alternate automated response so that the one alternate automated response can in the future be provided to the user for that contextual situation.

50. (New) The computing system of claim 49 including, before the creating of the association between the identified contextual situation and the one alternate automated response, verifying appropriateness of the association.

51. (New) The computing system of claim 49 including, after the creating of the association, detecting the identified contextual situation and in response providing the alternate automated response that is associated with the identified contextual situation.

52. (New) The computing system of claim 49 wherein at least some of the automated responses each include presenting information to the user that is appropriate based on a current contextual situation.

53. (New) The computing system of claim 49 including, after one of the automatic providings to the user of one of the automated responses associated with one of the defined contextual situations, explaining to the user the provided response based on the association between that one automated response and that one defined contextual situation.

54. (New) The computing system of claim 49 wherein the automatic detecting of the relationship is based on an automated learning algorithm.

55. (New) The computing system of claim 49 wherein the identified contextual situation is not a defined contextual situation, and wherein the creating of the association includes defining the identified contextual situation.

56. (New) The computing system of claim 49 wherein the computing system includes a memory configured to store at least portions of the first and second components and includes a processing unit configured to execute code associated with the first and second components.

57. (New) A wearable computing system configured to improve automated responses to a current context for a user, the current context being represented by a plurality of context attributes that each model an aspect of the context, multiple defined contextual situations each specifying values for at least one of the context attributes, multiple automated responses being associated with the defined contextual situations, comprising:

first means for repeatedly receiving an indication of current context information that includes current values for each of at least some of the plurality of context attributes, determining one of the defined contextual situations that matches the indicated current context information, determining one of the automated responses that is associated with the one defined contextual situation, receiving an indication from the user of an alternate automated response, and storing an indication of the indicated current context information and the alternate automated response;

second means for automatically detecting a relationship between an identified contextual situation and one of the alternate automated responses based on that alternate automated response being previously indicated by the user; and

third means for creating an association between the identified contextual situation and the one alternate automated response so that the one alternate automated response can in the future be provided to the user for that contextual situation.